Argus-A Global Bioevent Tracking System

Argus is a biosurveillance priming system designed to detect and track early indications and warnings of foreign biological events that may represent threats to global health and national security. Argus serves a "tipping function" designed to alert its users to events that may require action. It is not in the business of providing diagnostics, ground truth or determining whether (or what type of) action should be taken.

Argus is based on monitoring social disruption through native language reports in electronic local sources around the globe. Local societies are highly sensitive to perceived emergence of biological threats, and the resulting conditions and responses are readily identifiable through a granular review of local sources of information. Argus specifically focuses on three types of indications and warnings:
- Environmental conditions thought to be conducive to support outbreak triggering;
- Reports of disease outbreaks in humans or animals; and
- Markers of social disruption such as school closings or infrastructure overloads.

The system is built on a broad range of technologies and capabilities including:
- Advanced operational social disruption and event evolution theory;
- Unique disease event staging and warning systems modeled after NOAA and NASA;
- Development of biosurveillance doctrine and state of the art real-time high performance computer and internet technologies coupled with advanced modeling and linguistics capabilities;
- Visualization and modeling capabilities developed in collaboration with NASA, and the private sector; and
- Disease propagation modeling developed by academic colleagues.

Argus monitors social disruption through native language reports in electronic local sources around the globe. Argus currently accesses over a million pieces of information daily from every country in the world which results in producing, on average, 200 reports per day. Argus analysts are collectively fluent in 36 languages and are organized into teams focused on nine global regions outside the United States. Argus covers all of the U.S. recognized countries, and there are currently 315 accounts (many with multiple users) distributed among more than 200 organizations.

Over 2,200 individual case files of socially disruptive biological events are maintained and monitored daily involving 139 disease entities effecting humans or animals. These data are shared with our user community through the Argus Watchboard. Since the program began, Argus has logged over 50,000 biological events in varying stages of social disruption throughout the world involving pathogens such as H5N1 avian influenza, other influenza strains, Ebola virus, cholera, and other exotic pathogens.

To facilitate operational validation, the Biological Indication and Warning Analysis Community (BIWAC) was created. BIWAC reviews Argus reporting requirements on a quarterly basis to ensure proper product alignment with the user. BIWAC's membership is drawn from government organizations whose responsibilities include biosurveillance for public health and agricultural issues.